For Research Use Only

HSP27 Polyclonal antibody

Catalog Number: 18284-1-AP

Featured Product

40 Publications



Basic Information

Catalog Number:

18284-1-AP

BC012768

Concentration:

700 ug/ml

Source:

Rabbit

Cotype:

GenBank Accession Number:

GeneID (NCBI):

3315

UNIPROT ID:

P04792

Full Name:

heat shock 27kDa protein 1

Immunogen Catalog Number: Calculated MW:
AG13161 19-23 kDa
Observed MW:
27 kDa

Purification Method: Antigen affinity purification Recommended Dilutions: WB 1:5000-1:50000 IHC 1:50-1:500 IF/ICC 1:50-1:500

Applications

Tested Applications:

Cited Species:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications: WB, IHC, IF, IP, CoIP, ELISA Species Specificity: human, mouse, rat

human, mouse, rat, pig, chicken, fish

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: A549 cells, HeLa cells, C6 cells, mouse liver tissue, HepG2 cells, U2OS cells

IHC: human lung cancer tissue, human liver cancer

tissue, human gliomas tissue

IF/ICC: HeLa cells, MCF-7 cells

Background Information

HSPB1, also known as heat shock protein 27 (HSP27), belongs to the small heat shock protein family which is induced in response to environmental challenges or/and developmental transitions. It is also an anti-apoptotic protein that plays crucial roles in tumorigenesis and cell survival and is reported to be an independent prognosis marker for cancer. Recently HSPB1 has been found to be a valuable marker for melanoma. In addition to the predicted 27 kDa, an extra 50-55 kDa representing dimeric form of HSPB1 may also be observed (PMID: 21353161). It's notable that mouse HSP27 is also named HSP25 and has the predicted MW between 19-23 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Yini Dang	36297287	Pharmaceuticals (Basel)	WB
Folnetti A Alvarez	36114323	Breast Cancer Res Treat	WB
Ying Wang	31492751	J Biol Chem	WB

Storage

Storage:

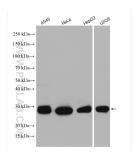
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

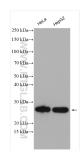
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

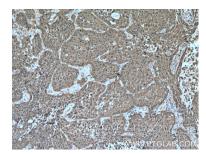
Selected Validation Data



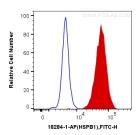
Various lysates were subjected to SDS PAGE followed by western blot with 18284-1-AP (HSP27 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



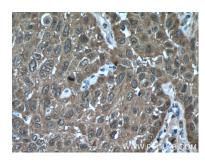
Various lysates were subjected to SDS PAGE followed by western blot with 18284-1-AP (HSP27 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



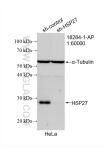
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 18284-1-AP (HSP27 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



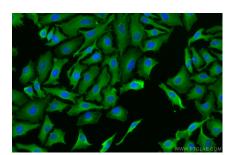
1X10^6 MCF-7 cells were intracellularly stained with 0.5 ug Anti-Human HSP27 (18284-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.5 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 18284-1-AP (HSP27 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of HSP27 antibody (18284-1-AP; 1:60000; incubated at room temperature for 1.5 hours) with sh-Control and sh-HSP27 transfected HeLa cells.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using HSP27 antibody (18284-1-AP) at dilution of 1:200 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).